

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Facilitating the Deployment of Text-to-911 and)	PS Docket No. 11-153
Other Next Generation 911 Applications)	
)	
Framework for Next Generation 911)	PS Docket No. 10-255
Deployment)	

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

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January 29, 2013

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I. INTRODUCTION AND SUMMARY

CTIA – The Wireless Association (“CTIA”) hereby submits these comments in response to the Commission’s Further Notice of Proposed Rulemaking (“*FNPRM*”) seeking comment on proposals regarding an automated bounce-back message to wireless subscribers who attempt to text 9-1-1 in an area where this capability is not available.¹ CTIA has been an active participant in this and related proceedings regarding next generation emergency communications services, and believes that the implementation of an automated bounce-back message will play a critical role in consumer education as the wireless industry and public safety transition to new emergency communications technologies. In response to the *FNPRM*, CTIA believes that the Commission should:

- Carefully consider whether the Commission has the necessary authority under the Communications Act of 1934, as amended (“Communications Act”), including the Communications & Video Accessibility Act (“CVAA”), to require wireless service providers and equipment manufacturers to support the proposed services.
- Continue to encourage voluntary efforts and allow the standard-setting and technology bodies to proceed in developing text-to-9-1-1 and NG9-1-1 systems organically. The

¹ *Facilitating the Deployment of Text-to-9-1-1 and Other Next Generation 911 Applications, Framework for Next Generation 911 Deployment*, Further Notice of Proposed Rulemaking, FCC 12-149 (Dec. 13, 2012) (“*FNPRM*”).

Commission should not take action that would require carriers to significantly revise their existing bounce-back notification framework.

- Only adopt those automated message requirements that are technically feasible.
- Ensure that its rules are clear and easy to understand. Using clear and consistent terminology throughout the Commission's proposed rules will be critical to avoiding both consumer and industry confusion.
- Coordinate with the appropriate public safety, accessibility, and wireless industry representatives to lead the effort to educate the public about the availability and limitations of text-to-9-1-1.
- Interpret the cost recovery provision of the Carrier-NENA-APCO Agreement consistently with its intent to permit cost recovery for costs associated with implementing bounce-back notifications. The Commission should not interpret the provision to imply that implementing bounce-back notifications is economically feasible.

The wireless industry shares the goal of ensuring that all citizens can effectively utilize wireless emergency services, such as 9-1-1, during times of need. CTIA and its member companies have been actively involved and have supported the NG9-1-1 development process for years throughout standard-setting organizations and regulatory bodies, at all levels of government and collaborating with the public safety community and representatives of persons with disabilities. In December 2012, CTIA member companies AT&T, Sprint, T-Mobile, and Verizon Wireless agreed to voluntarily enable text-to-9-1-1 on their networks by May 15, 2014.² This voluntary framework will provide near-term opportunities to meet the emergency communications needs of wireless subscribers who currently rely on Short Message Service

² Letter from Terry Hall, APCO International, Barbara Jaeger, NENA, Charles W. McKee, Sprint Nextel, Robert W. Quinn, Jr., AT&T, Kathleen O'Brien Ham, T-Mobile USA, and Kathleen Grillo, Verizon, to Julius Genachowski, Chairman, Federal Communications Commission, and Commissioners McDowell, Clyburn, Rosenworcel and Pai; PS Docket 11-153, PS Docket 10-255 (Dec. 6, 2012). (Carrier-NENA-APCO Agreement). CTIA notes that the Carrier-NENA-APCO Agreement's scope is limited to SMS solutions. *See id.* at 3 ("A voluntary SMS-to-9-1-1 solution will be limited to the capabilities of the existing SMS service offered by a participating wireless service provider on the home wireless network to which a wireless subscriber originates an SMS message.").

(“SMS”) for everyday communications and individuals who are deaf, hard of hearing, or speech impaired.³ Recognizing the value of a bounce-back notification system, these four carriers also agreed to implement, by June 30, 2013, a bounce-back auto-reply notification to alert subscribers attempting to text an emergency message to “911” that they must instead dial “911” when text-to-9-1-1 is unavailable in that geographic area.⁴ Several carriers have already implemented bounce-back alerts to subscribers who attempt to send a text message to “911” from an area where text-to-9-1-1 service is not available.

CTIA believes that the Commission can best achieve its important NG9-1-1 objectives by continuing to encourage the development of flexible, innovative solutions – such as the voluntary Carrier-NENA-APCO Agreement – by different groups representing a broad range of stakeholders. As CTIA has previously noted, the wireless industry has invested in developing technology and implementing processes to facilitate the transition to a NG9-1-1 system, and the industry stands ready to take the next steps necessary to deliver NG9-1-1 to all Americans.

II. THE COMMISSION’S LEGAL AUTHORITY TO REGULATE IN THIS AREA REMAINS UNCERTAIN

The wireless industry remains committed to collaborating with interested stakeholders to facilitate the deployment of viable solutions for text-based communications to 9-1-1. Recently, as part of this collaboration, four major wireless carriers voluntarily agreed to implement automatic bounce-back messages to notify consumers of the unavailability of text-to-9-1-1. Nevertheless, CTIA continues to question the Commission’s legal authority to mandate that

³ *Id.* at 1.

⁴ *Id.* at 2.

CMRS providers and other providers of text messaging services implement automatic bounce-back notifications.

Like the *NPRM*, the *FNPRM* advances three theories of legal authority for an automatic bounce-back requirement. In particular, the Commission again invokes its authority under the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”), its Title III authority, and its ancillary authority. But, as before, these assertions of authority do not withstand scrutiny.

CTIA has repeatedly raised concerns that the Commission lacks the legal authority to adopt regulations governing SMS messaging to 9-1-1 in this proceeding. Those concerns apply with equal force to the proposed automatic bounce-back requirement and CTIA incorporates by reference its past comments on the agency’s legal authority.⁵ Although CTIA and its members remain committed to working with the Commission on a voluntary basis to address these important matters, CTIA does not agree that the agency has the legal authority to mandate that wireless providers implement automatic error messages, even on an interim basis. CTIA’s comments in response to the *FNPRM* should not be considered acceptance of the Commission’s authority in this area.

⁵ See Reply Comments of CTIA – The Wireless Association®, PS Docket No. 11-153, PS Docket No. 10-255, at 9-16 (Feb. 9, 2012) (“CTIA February 2012 Reply Comments”); Comments of CTIA – The Wireless Association®, PS Docket No. 11-153, PS Docket No. 10-255, at 19-21 (Dec. 12, 2011) (“CTIA December 2011 Comments”); Comments of CTIA – The Wireless Association®, PS Docket No. 10-255, at 7-10 (Feb. 28, 2011) (“CTIA February 2011 Comments”).

III. ANY REQUIREMENTS RELATED TO AUTOMATED MESSAGES MUST BE TECHNICALLY FEASIBLE

As CTIA has noted above, its member companies are committed to the implementation of a NG9-1-1 system. To this end, several of CTIA's carrier members already have implemented automated messages to inform subscribers that they should dial, rather than text, 9-1-1 when the service is not available in that area. Although several carriers already have begun implementing bounce-back notifications, CTIA stresses that any automated message requirements that the Commission adopts must be technically feasible. In particular, CTIA is concerned that some of the Commission's proposals regarding automated messages do not reflect the very real technical limitations faced by the wireless industry in this area.

As noted in the Carrier-NENA-APCO voluntary agreement, SMS is a store-and-forward messaging technology that was never designed nor deployed to provide time-sensitive, mission critical service.⁶ Converting SMS text messaging into a current or next generation emergency communications medium continues to pose significant technical challenges. CTIA and many others have emphasized that, among other issues, SMS does not have native functionality for the provision of automatic location information.⁷ At most, SMS is a "best-efforts" service that is offered to meet the near term objective of providing a text-based emergency communications system.⁸ Although implementing automatic bounce-back messages will help educate subscribers about the availability of text-to-9-1-1 in a particular geographic area, it will not resolve the

⁶ Carrier-NENA-APCO Agreement at 1.

⁷ See, e.g., Reply Comments of CTIA – The Wireless Association®, PS Docket No. 10-255, at 6 (Mar. 14, 2011) ("CTIA March 2011 Reply Comments"); Comments of the Association of Public-Safety Communications Officials International, Inc., PS Docket No. 10-255 at 2 (Feb. 28, 2011) ("APCO Comments"); Comments of the National Emergency Numbering Association, PS Docket No. 10-255 at 14-15 (Feb. 28, 2011) ("NENA Comments").

⁸ Carrier-NENA-APCO Agreement at 2.

substantial technical challenges inherent in converting SMS to an emergency communications medium. CTIA respectfully requests that the Commission acknowledge that automated bounce-back messages, while helpful for subscriber education, will not cure the fundamental challenge that SMS simply does not offer sufficient reliability for emergencies.

The Commission has proposed requiring wireless carriers to transmit an automated message where it is “unable to transmit the text message to the PSAP serving the party’s location, whether due to network congestion, the inability of the PSAP to accept such messages, or otherwise.”⁹ This proposal does not account for the reality that current network architectures do not permit carriers to support automated SMS messages for granular issues such as network congestion, return receipts, and an individual Public Safety Answering Point’s (“PSAP”) ability to respond to a text message in a timely manner (“PSAP busy notification”).

Although wireless carriers have been able to implement bounce-back notifications to alert subscribers that text-to-9-1-1 capabilities have not been deployed in a given geographic area, current network architecture does not support bounce-back notifications when a text message cannot be transmitted due to network congestion or PSAP busy notification. Because bounce-back notifications for these granular issues are not currently technically feasible, CTIA submits that carriers’ obligations with respect to automated messages should only extend to notifications relating to the general support for text-to-9-1-1 service in that geographic area by the wireless carrier or PSAP. As an example, only the PSAP will have the technical capability to alert subscribers of SMS-based text-to-9-1-1 of the PSAP’s temporary inability to receive text messages, whether due to technical, operational or personnel issues. Providers of text-to-9-1-1 capabilities must not be required to alert subscribers in this instance, as these PSAP

⁹ *FNPRM* at ¶ 32.

complications could arise without wireless providers' knowledge, particularly for SMS-based text-to-9-1-1.

In addition, including the phrase "or otherwise"¹⁰ in the proposed rule creates considerable uncertainty about when providers of text-to-9-1-1 capabilities would be required to transmit an automated bounce-back message. The "or otherwise" language also is problematic because it is not technically feasible to implement bounce-back notifications for any issue other than the availability of text-to-9-1-1 in a particular geographic area.

The Commission's proposal to use 9-1-1 as the designated short code for text messages sent to PSAPs is not technically feasible for all existing wireless handsets. Some existing wireless handsets do not have the capability to support texting to a three-digit code such as 9-1-1.¹¹ Therefore, CTIA is concerned that the Commission's proposed rules would require the ability to send a text message to 9-1-1 from some wireless handsets that do not support this capability.¹² CTIA maintains that the rules promulgated by the Commission must be technically feasible and using a three-digit designated short code is not technically feasible for all wireless handsets. The proposed rules should not apply when subscribers are attempting to text 9-1-1 from a wireless handset that is not capable of texting to 9-1-1.

¹⁰ *Id.*

¹¹ See, e.g., Letter from Bennett L. Ross, counsel to Motorola Mobility, Inc. to Marlene H. Dortch, Federal Communications Commission, PS Docket No. 11-153, at 1 (Apr. 17, 2012) ("Motorola has released well in excess of 100 mobile device and software combinations in the U.S. market within the past three years, none of which has been tested for support for 911 as a SMS short code. As a result, with the installed base of Motorola devices, end users' experiences in trying to use 911 as an SMS short code may be seriously lacking.").

CTIA also notes that Common Short Codes are comprised of either five-digit or six-digit numbers. See http://www.usshortcodes.com/csc_csc.html.

¹² See *FNPRM* at App. B, § 20.18(n)(3) (proposed rule).

Although CTIA is concerned that some of the Commission’s proposed rules do not reflect the technical limitations faced by wireless carriers, CTIA supports the Commission’s proposal not to require all text-to-9-1-1 providers to use the exact same wording for their automatic messages to subscribers. The Commission’s *FNPRM* clarifies that providers would meet the automatic message requirement “so long as the error message includ[es] information on how to contact the PSAP.”¹³ Permitting flexibility in the wording of automated messages is beneficial because it avoids requiring carriers to revise the work that has already been done to implement bounce-back notification systems. The proposal also will allow wireless carriers to continue to research and develop wording that is most appropriate to include in the automatic messages.

IV. THE COMMISSION’S RULES MUST BE CLEAR AND EASILY UNDERSTOOD

As the Commission correctly noted in the *FNPRM*, the public must have a clear understanding of the emergency services available to them in their area and how to communicate with them.¹⁴ As part of this education process, it also is vital that the Commission adopt rules for text-to-9-1-1 that are clearly and consistently worded. However, in several instances, the *FNPRM* and/or the Commission’s proposed rule use inconsistent or inaccurate terminology that could create confusion for both consumers and those potentially regulated by the Commission.

The Commission has used several similar-sounding but distinguishable terms throughout the *FNPRM* to describe the universe of providers who would be subject to the proposed rules. In particular, the *FNPRM* refers, at various points, to “interconnected text messaging providers,”¹⁵

¹³ *Id.* at ¶ 32.

¹⁴ *Id.* at ¶¶ 36-37.

¹⁵ *Id.* at ¶ 2.

“other providers of text messaging services,”¹⁶ “prospective text-to-9-1-1 service providers,”¹⁷ “prospective providers of interconnected text service”¹⁸ and “interconnected text application providers.”¹⁹ To avoid potential confusion, the Commission should either (1) use consistent terminology throughout the *FNPRM* and the proposed rules or (2) provide a detailed explanation as to the differences among these various provider types and state how it proposes the rules would apply to each.

In a similar vein, the Commission uses inconsistent terms to describe the types of mobile devices that would be covered by the proposed rules. In particular, the Commission’s proposed rules refer to both “text-capable wireless handset[s]”²⁰ and “mobile device model[s].”²¹ Using both terms, without providing definitions, creates ambiguity about what is covered by the Commission’s proposed rules. Again, the Commission should either use consistent, defined terminology throughout the *FNPRM* and proposed rules or clarify, with greater precision, the mobile devices that the proposed rule would cover.

Additionally, the *FNPRM* uses inaccurate terms to refer to automated messages. In some instances, the *FNPRM* refers to the automated message as an “error message.”²² Elsewhere, the

¹⁶ *Id.* at ¶ 25.

¹⁷ *Id.* at ¶ 26.

¹⁸ *Id.* at ¶ 29.

¹⁹ *Id.* at App. B, § 20.18(n)(6)(a) (proposed rule).

²⁰ *Id.* at App. B, § 20.18(n)(2) (proposed rule).

²¹ *Id.* at App. B, § 20.18(n)(2)(a) (proposed rule).

²² *Id.* at ¶ 2.

FNPRM states that the automated bounce-back messages would cover “failed”²³ text-to-9-1-1 attempts. This terminology does not accurately reflect the purpose and scope of the automated bounce-back message. Under current network standards and architectures, automatic bounce-back messages can only be sent to subscribers when the subscriber attempts to send a text-to-9-1-1 from a geographic area where the service has not been implemented. Thus, the automated bounce-back message is not the product of any “error” or “failure” of transmission. Clarifying the purpose and scope of the automatic message will help prevent subscriber confusion and promote the public’s understanding of current NG9-1-1 system limitations. Accordingly, the Commission should make clear that receipt of an automated message is tied only to the availability of the text-to-9-1-1 service and is not associated with isolated transmission errors.

Finally, both the *FNPRM* and the Commission’s proposed rules refer to “consumers” sending text messages to 9-1-1 rather than “subscribers.” Using “consumers” rather than “subscribers” suggests a Commission presumption that all consumers, regardless of subscription, should be able to access the text-to-9-1-1 service. CTIA has raised significant concerns with continuing an “all calls” approach for new 9-1-1 emergency communications services.²⁴ In addition, the existing network standards and architectures for text messaging, such as SMS, require a message to be originated from a wireless handset with valid service. For these reasons, CTIA submits that “subscribers” is the more appropriate term to use throughout the *FNPRM* and the proposed rule.

²³ *Id.* at III.A (heading).

²⁴ *See* CTIA December 2011 Comments at 8 (explaining the policy challenges raised by the Commission’s “all calls” rule).

V. PUBLIC EDUCATION REGARDING THE AUTOMATED MESSAGE IS ESSENTIAL

The Commission correctly stated in the *FNPRM* that “educating the public is critical to the successful roll-out of text-to-911 and preventing consumer confusion.”²⁵ CTIA supports efforts to educate the public regarding 9-1-1 and NG9-1-1 capabilities, and believes that such education efforts are critical to managing the public’s expectations regarding the NG9-1-1 services available during emergencies. Automated messages will play an important role in educating the public about the availability of text-to-9-1-1 in their area, but the public also will need to be educated about other aspects of text-to-9-1-1 as well. CTIA agrees with the Commission’s recognition that “[a]side from educating the public about the availability or unavailability of text-to-911, education is also imperative to inform the public about the capabilities and limitations of text-to-911 where it is available, and the circumstances under which texting 911 is or is not preferable to making a 911 voice call.”²⁶ For example, the public will need to be made aware of the limitations on different wireless handsets’ text-to-9-1-1 capabilities and educated about whether their wireless handset supports text-to-9-1-1 services. To successfully transition to NG9-1-1 systems, the FCC and appropriate public safety representatives, in coordination with the wireless industry and representatives of individuals with disabilities, must lead the effort to educate the public about the availability and limitations of text-to-9-1-1.²⁷

²⁵ *FNPRM* at ¶ 36.

²⁶ *Id.* at ¶ 37.

²⁷ See CTIA February 2012 Reply Comments at 28-30 (“[C]onsumer education requires that federal and state entities, as well as Public Safety agencies and consumer representatives, participate in the consumer education process, and that the responsibility not be left solely to the wireless industry.”); CTIA December 2011 Comments at 17; CTIA March 2011 Reply

The signatory service providers to the voluntary agreement have stated that they will work with APCO, NENA, and the FCC to develop an outreach effort. However, CTIA also urges the Commission to make clear that text-to-9-1-1 is not currently an option in the vast majority of the country. Successfully managing the public's expectations of text-to-9-1-1 services through effective public education will help promote trust and understanding of the text-to-9-1-1 system. As the promise of text-to-9-1-1 continues to make headlines, the Commission must therefore clarify to the public the availability (or lack thereof) of text-to-9-1-1 services.

VI. THE CARRIER-NENA-APCO AGREEMENT DOES NOT IMPLY THAT THE COSTS OF IMPLEMENTING BOUNCE-BACK NOTIFICATIONS ARE *DE FACTO* “MANAGEABLE”

As part of the comprehensive voluntary framework adopted in the Carrier-NENA-APCO Agreement, the carriers agreed to meet their commitments to enable text-to-9-1-1 and implement bounce-back notifications “independent of their ability to recover . . . costs from state or local governments.”²⁸ The Commission has misinterpreted the intent of this cost recovery provision to suggest that “requiring automatic error messages appears to be feasible at a reasonable cost.”²⁹ In particular, the Commission has erroneously interpreted the cost recovery provision of the Carrier-NENA-APCO Agreement to mean that “the costs for implementing a bounce-back message are manageable, regardless of whether such costs are recoverable under current state or

Comments at 12 (“Various respondents echoed CTIA’s suggestion that, upon formalizing the standards and deployment plans, a coordinated public education effort will be required to ensure that citizens understand the strengths and weaknesses of the new system, and how to use it.”); CTIA February 2011 Comments at 15.

²⁸ Carrier-NENA-APCO Agreement at 3.

²⁹ *FNPRM* at ¶ 27.

local cost recovery programs.”³⁰ To the contrary, CTIA’s member company signatories have noted that the Carrier-NENA-APCO Agreement did not intend to suggest that the costs of implementing bounce-back messages are manageable. Instead, the provision was intended to allow, but not require, existing cost recovery to be utilized for the bounce-back message implementation. The provision is not correlated with either the technical or economic feasibility of implementing bounce-back message systems. Providers of text-to-9-1-1 all have unique network architectures for text messaging services and, therefore, the costs associated with implementing a bounce-back notification system may vary widely amongst providers. Thus, interpreting the cost recovery provision to mean that the costs of implementing bounce-back messages are manageable contravenes both the intent of the cost recovery provision and technical realities. In sum, the Commission should not interpret the cost recovery provision to imply that implementing bounce-back messages is economically feasible.

VII. CONCLUSION

CTIA reiterates that the wireless industry is committed to ensuring that wireless subscribers can access emergency communications services when they need them most. The industry has long been working with the public safety community and representatives of persons with disabilities to consider interim text-to-9-1-1 solutions, planning for the transition to NG9-1-1 and has been deeply involved in development efforts at all stages. While the wireless industry will continue to strive to ensure that its networks, devices, and services are capable of

³⁰

Id.

providing NG9-1-1 performance to Americans, the Commission also must take appropriate steps to provide a sound legal, financial, and operational environment for text-to-9-1-1 services.

Respectfully submitted,

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